

Work Order ID 138073

October 22, 2015 4:27:46 PM

138073

Page 1

Ship Nov 2/15

Item ID: D4450-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Arm
 Start Date: 10/22/2015 Start Qty: ~~1.00~~ ***1*** Cust Item ID:
 Required Date: 10/28/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: STA Date: 20151022 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4450	A

100	Small Fab	0.00				<u>2</u>	<u>88</u>	<u>OCT 26 2015</u>
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100
 Small Fab
 Small Fab
 Memo
 1- punch one side
 2- bend as per dwg
 3- drill holes as per dwg USING DT9946
 4- deburr

110	QC5- Inspect part completeness to step on W/O	0.00				<u>(2)</u>		<u>DAS</u> <u>38</u> <u>9-89</u>
-----	---	------	--	--	--	------------	--	--

110
 QC
 Quality Control
 Memo
 OCT 26 2015

120	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3	0.00				<u>2</u>	<u>15-10-26</u>	<u>238</u>
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120
 Powdercoat
 Powder Coating
 Memo
 START TIME: 3:15 OVEN TEMPERATURE:
 FINISH TIME: 3:45

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Item ID: D4450-1
 Revision ID:
 Item Name: Arm
 Start Date: 10/22/2015 Start Qty: 1.00
 Required Date: 10/28/2015 Req'd Qty: 1.00
 Reference:

Accept ***N900040100*** Setup Start ***NS1***
 Stop ***NS2***

Cust Item ID:
 Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC3- Inspect Part Finish	0.00				(2)			DAS 38 9-89
130									
QC	Memo	0.00							
Quality Control									OCT 27 2015
140	Identify as per dwg & Stock Location: <u>St360</u>	0.00							
140									
Packaging	Memo	0.00				2			DAS 6 9-89
Packaging									OCT 28 2014
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							
Quality Control									15/10/28

20151028

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 138073

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Parent Item: D4450-1

D4450-1

Parent Item Name: Arm

Start Date: 10/22/2015

Required Date: 10/28/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 11.11.14 NEW ISSUE DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.500W.049		Purchased			No	100	f	272.9634	2.3	2.421053			
M304TR0 500W 049									**			OCT 26 2015	
304 RD Tube .500 x .049W													

Location

Loc Qty

Loc Code

GA002

272.96343

M127937

9.4211

M128833

0.00003

M132872

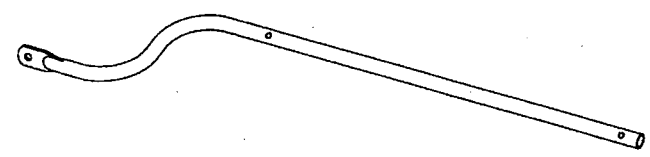
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4.842106

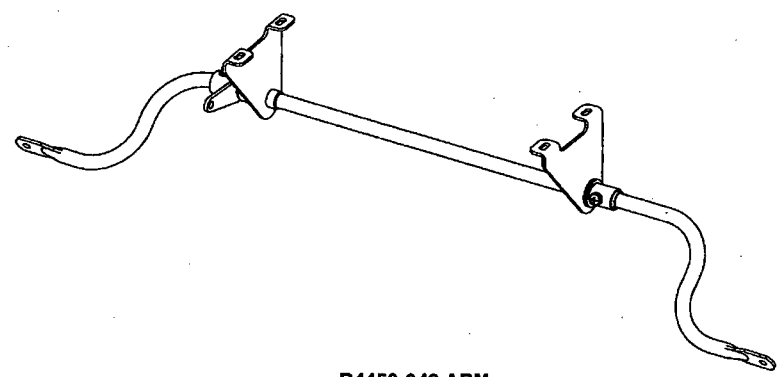
8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A



D4450-1 ARM



D4450-043 ARM

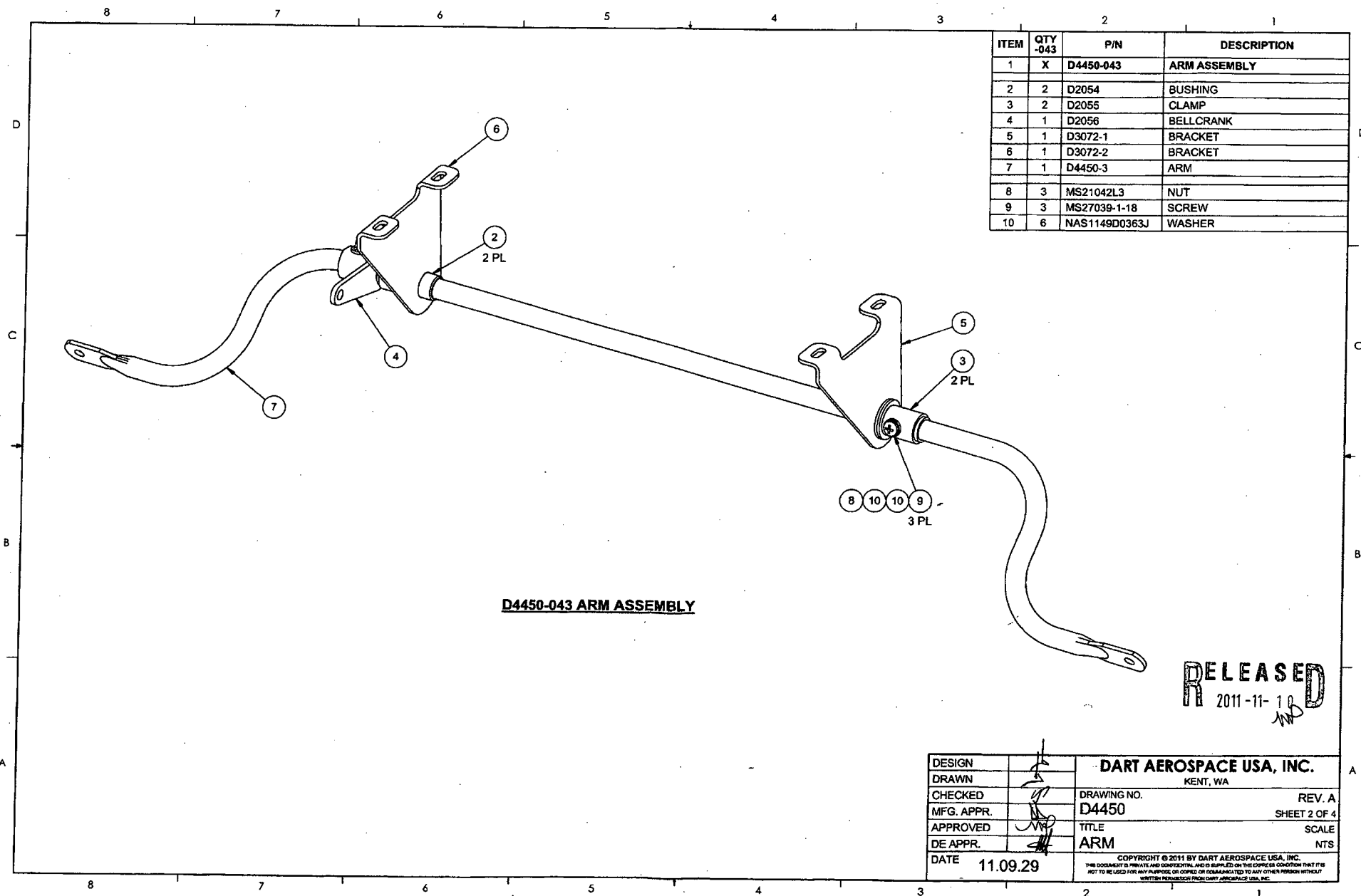
RELEASED
2011-11-10

120151023

SH 138073

A	NEW ISSUE	DESCRIPTION	MB	11.09.29
REV.			BY	DATE
DESIGN		DART AEROSPACE USA, INC.		
DRAWN		KENT, WA		
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		D4450	SHEET 1 OF 4	
APPROVED		TITLE	SCALE	
DE APPR.		ARM	NTS	
DATE	11.09.29	COPYRIGHT © 2011 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		

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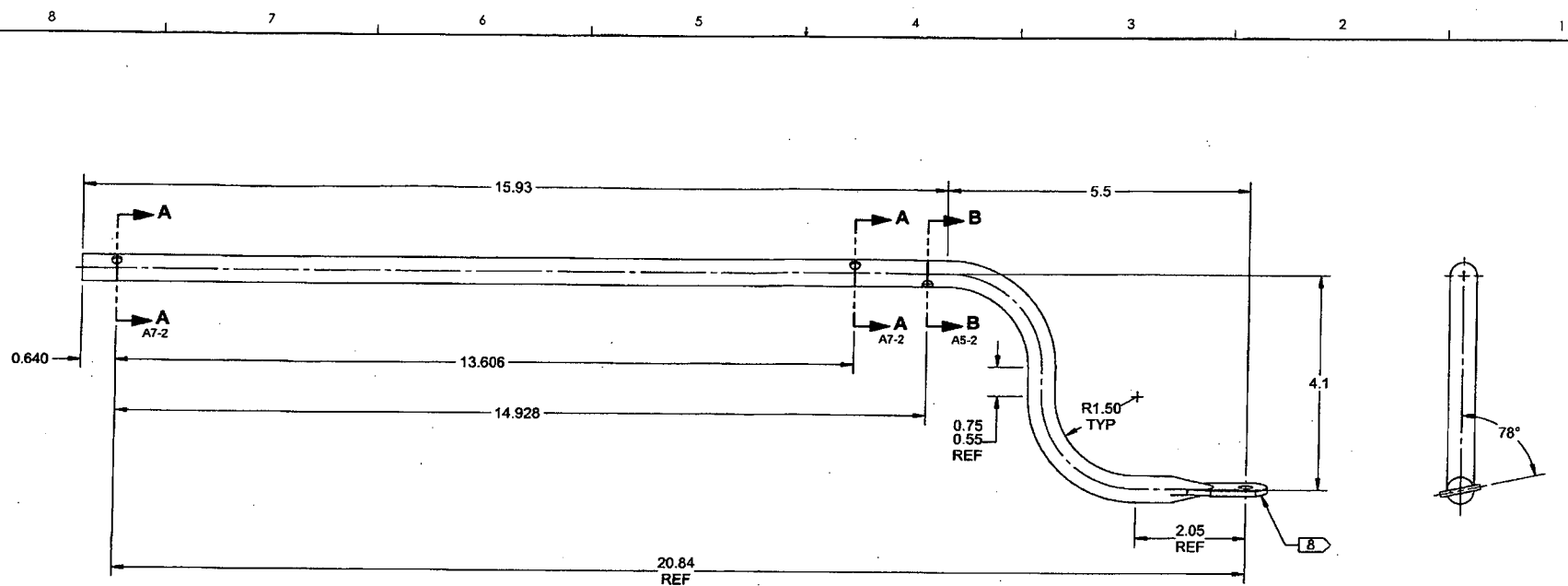


ITEM	QTY -043	P/N	DESCRIPTION
1	X	D4450-043	ARM ASSEMBLY
2	2	D2054	BUSHING
3	2	D2055	CLAMP
4	1	D2056	BELLCRANK
5	1	D3072-1	BRACKET
6	1	D3072-2	BRACKET
7	1	D4450-3	ARM
8	3	MS21042L3	NUT
9	3	MS27039-1-18	SCREW
10	6	NAS1149D0363J	WASHER

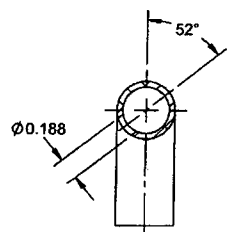
D4450-043 ARM ASSEMBLY

RELEASED
2011-11-18

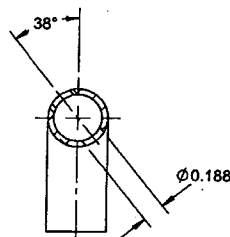
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CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4450	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		ARM	NTS
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D4450-1 ARM



SECTION A-A
SCALE 2X C4-2 C8-2



SECTION B-B
SCALE 2X C4-2

D4450-1 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING, $\phi 0.50 \times 0.049$ WALL
PER ASTM A213 OR ASME SA213 OR ASTM A269
REF. DART SPEC. M304TR0.500W.049
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.49 lbs
- 8) PUNCH END PER SPEC. CONTROL DRAWING D2727

RELEASED
2011-11-18

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CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4450	SHEET 3 OF 4
APPROVED		TITLE	SCALE
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